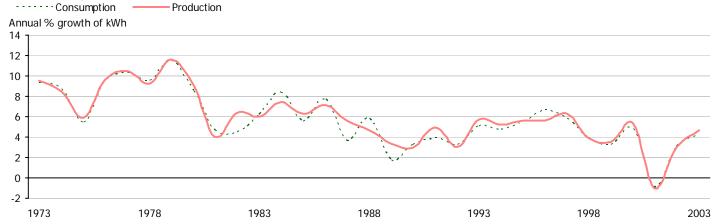
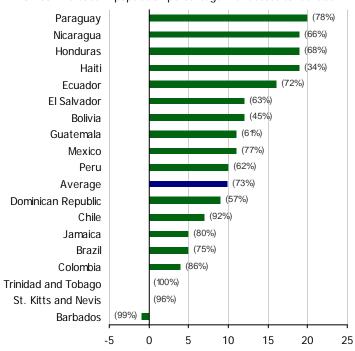
### **Electricity Production and Consumption Growth in LAC**



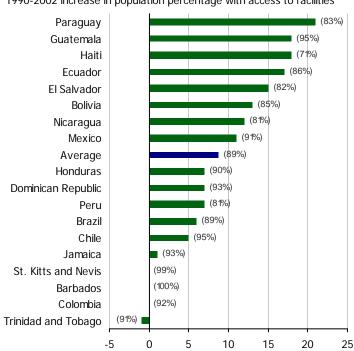
# Increase in Access to Sanitation Services (and current level of access)

1990-2002 increase in population percentage with access to facilities



# Increase in Access to Improved Water Sources (and current level of access)

1990-2002 increase in population percentage with access to facilities

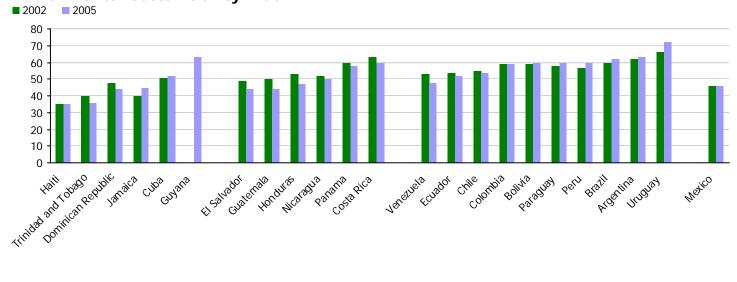


### 5.1 | Environmental Sustainability Index

		erall dex		Systems Component				sses			man rability			Capacity Component		Stewardship Component	
	2002	2005	Ι	2002	2005		2002	2005		2002	2005	200	2	2005		2002	2005
Cuba	51	52		31	39		70	61		73	69	43		37		53	57
Dominican Republic	48	44		37	31		65	59		52	45	42		43	-	48	37
Guyana		63			90			65			37	.		41			47
Haiti	35	35		18	22		56	55		8	17	36		25		58	54
Jamaica	40	45		21	32		48	48		61	58	47		44		38	48
Trinidad and Tobago	40	36		50	36		47	42		71	71	32		26		13	13
Caribbean					-			-									
Costa Rica	63	60		52	54		45	52		79	59	81		73		65	67
El Salvador	49	44		50	36		49	42		49	33	41		47		60	68
Guatemala	50	44		54	41		51	50		52	29	39		42		56	54
Honduras	53	47		57	44		56	58		61	27	42		42		55	59
Nicaragua	52	50		61	70		55	59		46	14	37		38		60	57
Panama	60	58		57	65		61	56		66	63	62		47		55	57
Central America																	
Argentina	62	63		72	68		61	55		75	70	52		65		50	59
Bolivia	59	60		71	80		61	60		44	45	49		44		63	54
Brazil	60	62		66	66		63	58		66	62	52		62		50	66
Chile	55	54		50	54		57	43		80	58	58		63		36	57
Colombia	59	59		70	69		59	53		72	56	43		61		59	54
Ecuador	54	52		65	64		57	56		61	43	37		47		55	42
Paraguay	58	60		64	76		52	51		61	55	53		44		62	73
Peru	57	60		69	65		65	54		51	57	46		57		41	72
Uruguay	66	72		65	71		61	67		81	78	68		74		61	74
Venezuela	53	48		77	68		61	56		58	41	31		34		31	27
South America																	
Mexico	46	46		31	41		55	47	I	67	62	42		48	1	49	37

### **Environmental Sustainability Index**

LAC



### 5.2 | Threatened Species and Protected Areas

	Animal Species Threatened (number)	Plant Species Threatened (number)	Protected Area % of   Surface Area	Protected Areas (hectares)	Protected Areas (number)	Protected Marine Areas (hectares)	Protected Marine Areas (number)
Antigua and Barbuda	18	4	0.2	6,628	4	6,628	8
Aruba	18			70	1	70	1
Bahamas	32	5	0.1	145,838	38	123,592	10
Barbados	15	2	0.0	248	3	5,252	5
Belize	29	30	0.4	1,008,451	50	177,137	10
Bermuda	43	4	2.4	13,101	13	14,864	31
British Virgin Islands	20	11	0.1	2,093	29	18,821	23
Cayman Islands	16	2	0.3	8,997	32	8,373	24
Dominica	19	11	0.2	17,028	6	531	2
Dominican Republic	43	30	1.7	1,081,980	19	880,785	9
Falkland Islands	8	5	0.0	11,103	29		
French Guiana	30	16	0.0	594,242	20		
Grenada	18	3	0.0	618	1	1,113	4
Guyana	35	23	0.0	58,559	1		
Haiti	41	29	0.0	9,745	8		
Jamaica	46	208	0.1	915,892	143	819,245	11
Martinique	20	9	0.7	135,726	15	679	2
Netherlands Antilles	23	2	0.1	7,815	3	55	1
St. Kitts and Nevis	18	2	0.1	15	1	2,610	3
St. Lucia	23	6	0.2	5,302	34	32	15
St. Vincent and Grenadines	19	5	0.2	8,284	25	3,885	5
Suriname	31	27	0.1	804,290	14	12,000	1
Trinidad and Tobago	23	1	0.0	30,715	18	751	2
Turks and Caicos Islands	19	2	1.7	71,713	32	62,741	12
Caribbean							
Costa Rica	56	110	0.2	1,115,527	71	226,790	12
El Salvador	14	26	0.0	5,222	2		
Guatemala	44	85	0.2	2,080,833	29	38,400	1
Honduras	37	111	0.1	938,809	72	226,537	25
Nicaragua	37	39	0.1	2,155,039	72	50,000	1
Panama	59	195	0.2	1,786,405	33	329,480	4
Central America							
Argentina	101	42	0.0	18,140,829	319	192,000	2
Bolivia	57	70	0.2	15,098,694	30		
Brazil	283	381	0.1	47,694,070	736	2,311,535	22
Chile	48	40	0.2	14,207,538	87	48,704	4
Colombia	154	222	0.1	9,467,009	95	650,495	9
Ecuador	163	986	0.6	12,854,755	25	8,095,043	3
Paraguay	39	10	0.0	1,401,137	20		
Peru	138	274	0.1	6,820,336	35		
Uruguay	32	1	0.0	47,705	13		
Venezuela	83	67	0.6	56,305,682	194	688,589	14
South America							
Mexico	283	261	0.1	17,787,643	203	762,847	14
						*	-

# 5.3 | Land Resources and Use percent of total land area

	Land Area	Total Agri- Permaner cultural Area Pasture						r Land se	Force	t Area	
	(sq. km)	1992	2002	1992	2002	1992	ops 2002	1992	se 2002	1990	2005
Antigua and Barbuda	440	31.8	31.8	9.1	9.1	22.7	22.7	77.3	77.3	20.5	20.5
Bahamas	10,010	1.2	1.4	0.2	0.2	1.0	1.2	99.0	98.8	51.4	51.4
Barbados	430	44.2	44.2	4.7	4.7	39.5	39.5	60.5	60.5	4.7	4.7
Belize	22,810	6.0	6.7	2.1	2.2	3.8	4.5	96.2	95.5	72.5	72.5
Bermuda	50	20.0	20.0			20.0	20.0	80.0	80.0	20.0	20.0
Cayman Islands	260	11.5	11.5	7.7	7.7	3.8	3.8	96.2	96.2	46.2	46.2
Dominica	750	24.0	29.3	2.7	2.7	21.3	26.7	78.7	73.3	66.7	61.3
Dominican Republic	48,380	,   75.2	76.4	43.2	43.4	32.0	33.0	68.0	67.0	28.4	28.4
Falkland Islands		99.3	92.9	99.3	92.9						
Grenada	340	35.3	38.2	2.9	2.9	32.4	35.3	67.6	64.7	11.8	11.8
Guadeloupe		31.4	28.4	13.6	13.6	17.8	14.8	82.2	85.2	.	
Guyana	196,850	'   8.8	8.8	6.2	6.2	2.6	2.6	97.4	97.4	,   76.7	76.7
Haiti	27,560	'   57.9	57.7	18.0	17.8	39.9	39.9	60.1	60.1	4.2	3.8
Jamaica	10,830	44.0	47.4	22.2	21.1	21.8	26.2	78.2	73.8	31.9	31.3
Martinique		33.0	31.1	17.0	11.3	16.0	19.8	84.0	80.2	.	
St. Kitts and Nevis	360	33.3	27.8	5.6	5.6	27.8	22.2	72.2	77.8	13.9	13.9
St. Lucia	610	34.4	32.8	4.9	3.3	29.5	29.5	70.5	70.5	27.9	27.9
St. Vincent and Grenadines	390	35.9	41.0	5.1	5.1	30.8	35.9	69.2	64.1	23.1	28.2
Suriname	156,000	0.6	0.6	0.1	0.1	0.4	0.4	99.6	99.6	94.7	94.7
Trinidad and Tobago	5,130	25.9	25.9	2.1	2.1	23.8	23.8	76.2	76.2	45.8	44.1
Caribbean											
Costa Rica	51,060	55.8	56.1	45.8	45.8	10.0	10.3	90.0	89.7	50.2	46.8
El Salvador	20,720	72.4	82.2	31.4	38.3	41.1	43.9	58.9	56.1	18.1	14.4
Guatemala	108,430	39.5	41.6	23.1	24.0	16.5	17.6	83.5	82.4	43.8	36.3
Honduras	111,890	30.0	26.2	13.4	13.5	16.6	12.8	83.4	87.2	66.0	41.5
Nicaragua	121,400	52.2	57.5	39.7	39.7	12.6	17.8	87.4	82.2	53.9	42.7
Panama	74,430	28.9	30.0	20.0	20.6	8.9	9.3	91.1	90.7	58.8	57.7
Central America											
Argentina	2,736,690	63.0	64.7	51.9	51.9	11.1	12.8	88.9	87.2	12.9	12.1
Bolivia	1,084,380	33.0	34.1	30.9	31.2	2.1	2.9	97.9	97.1	57.9	54.2
Brazil	8,459,420	29.2	31.2	22.2	23.3	7.0	7.9	93.0	92.1	61.5	56.5
Chile	748,800	20.8	20.4	17.2	17.3	3.6	3.1	96.4	96.9	20.4	21.5
Colombia	1,038,700	43.3	44.2	38.6	40.5	4.7	3.7	95.3	96.3	59.1	58.5
Ecuador	276,840	28.7	29.2	17.8	18.4	10.9	10.8	89.1	89.2	49.9	39.2
Paraguay	397,300	60.6	62.5	54.6	54.6	6.0	7.8	94.0	92.2	53.3	46.5
Peru	1,280,000	24.3	24.5	21.2	21.2	3.2	3.4	96.8	96.6	54.8	53.7
Jruguay	175,020	84.7	85.0	77.2	77.4	7.5	7.7	92.5	92.3	5.2	8.6
/enezuela	882,050	24.5	24.5	20.7	20.7	3.8	3.9	96.2	96.1	59.0	54.1
South America											
Mexico	1,908,690	54.9	56.2	41.1	41.9	13.7	14.3	86.3	85.7	36.2	33.7

### 5.4 | Agriculture and Aquaculture

	Produ Index	ultural uction (1999- =100)	Produ Index	od uction (1999- =100)	Consu	ilizer mption c tons)	Produ	ilizer uction c tons)	Crusta and Mollu	sh, ceans, iscs Catch c tons)
	1993	2003	1994	2004	1992	2002	1992	2002	1992	2002
Anguilla									386	250
Antigua and Barbuda	115	104	104	108					1,712	2,374
Bahamas	76	97	66	105	300	800	0	0	9,846	9,300
Barbados	92	93	84	101	2,700	811	0	0	3,574	2,500
Belize	92	94	68	117	5,800	4,700	0	0	2,414	24,753
Bermuda	·				100	100	0	0	432	393
Dominica	125	96	106	98	4,600	543	0	0	711	1,217
Dominican Republic	119	103	104	103	83,900	89,703	0	0	12,840	18,339
Falkland Islands	169	99							1,855	35,656
Grenada	104	101	109	99					2,052	2,171
Guadeloupe	105	98			8,600	18,500	0	0	8,540	10,100
Guyana	77	105	81	105	12,200	17,879	0	0	41,252	48,017
Haiti	106	99	95	101	4,300	13,930	0	0	5,000	5,000
Jamaica	99	98	99	99	21,300	22,400	0	0	19,100	5,650
Martinique	82	98			20,995	17,700	0	0	4,538	6,200
St. Kitts and Nevis	107	100	96	100	1,100	1,700	0	0	300	355
St. Lucia	159	96	122	92	6,500	1,343	0	0	1,073	1,637
St. Vincent and Grenadines	151	105	90	104	2,400	2,133	0	0	2,157	43,879
Suriname	133	104	124	101	2,900	5,600	0	0	10,930	18,700
Trinidad and Tobago	97	115	94	118	9,600	3,258	209,800	310,223	13,000	12,539
Caribbean	71	113	74	110	7,000	3,230	207,000	310,223	13,000	12,337
Calibbeall										
Costa Rica	84	106	80	99	122,800	151,562	39,900	0	16,009	32,938
El Salvador	107	91	85	105	74,969	55,333	16,515	0	12,076	
	96				•					34,455
Guatemala		92	82	104	157,900	186,200	10,400	0	6,578	24,164
Honduras	102	97 107	96 72	111	40,668	50,228	0	0	16,486	11,402
Nicaragua	89	107	73	123	31,300	53,796	0	0	6,718	23,670
Panama	113	99	99	104	35,494	28,719	0	0	172,249	305,081
Central America										
Argentina	82	99	80	102	248,200	739,526	32,688	523,700	703,425	944,346
Bolivia	83	110	78	110	13,737	13,741	0	0	4,905	5,800
Brazil	83	114	81	124	3,535,540	7,682,000	1,852,025	2,608,732	741,320	822,159
Chile	92	102	87	113	344,000	455,000	165,300	524,000	6,432,324	4,271,47
Colombia	104	99	88	110	511,400	691,500	160,500	22,000	141,170	135,000
Ecuador	90	102	87	107	97,800	229,522	0	0	226,817	318,540
Paraguay	103	105	79	115	21,897	153,168	0	0	17,925	25,000
Peru	68	105	68	110	80,572	274,007	13,600	2,538	7,502,192	8,766,99
Uruguay	87	100	87	116	81,200	128,929	17,000	12,000	125,751	108,765
Venezuela	95	92	77	98	322,000	300,000	363,000	575,500	330,964	515,384
South America										
Mexico	91	100	85	108	1,616,000	1,711,900	1,728,600	477,658	1,157,573	1,450,65
LAC										

### 5.5 | Water Use - 2000

	Total Use	Per capita Use	Domestic	Industrial	Agricultural
	(cubic kilometers)	(cubic meters)	(% total)	(% total)	(% total)
Barbados	0.1	314.8	33.4	44.1	22.6
Belize	0.1	518.5	11.2	88.7	0.2
Cuba	8.2	732.4	19.0	12.2	68.8
Dominican Republic	3.4	405.4	32.1	1.7	66.2
Guyana	1.6	2,163.9	1.7	0.9	97.4
Haiti	1.0	123.0	4.6	0.9	94.5
Jamaica	0.4	158.7	34.2	16.9	48.9
Suriname	0.7	1,564.6	4.5	2.9	92.6
Trinidad and Tobago	0.3	237.0	67.5	27.0	5.6
Caribbean	15.8	690.9	23.1	21.7	55.2
Costa Rica	2.7	681.3	29.5	17.1	53.5
El Salvador	1.3	205.0	24.8	15.8	59.4
Guatemala	2.0	175.5	6.5	13.4	80.2
Honduras	0.9	133.2	8.2	11.2	80.6
Nicaragua	1.3	256.3	14.4	2.5	83.0
Panama	0.8	279.4	66.4	5.2	28.3
Central America	8.9	288.5	24.9	10.9	64.2
Argentina	29.1	784.2	16.5	9.5	74.0
Bolivia	1.4	166.8	13.3	3.5	83.3
Brazil	59.3	345.2	20.3	18.0	61.8
Chile	12.5	823.6	11.3	25.2	63.5
Colombia	10.7	254.3	50.3	3.8	45.9
Ecuador	17.0	1,367.1	12.5	5.3	82.2
Paraguay	0.5	89.4	19.7	8.6	71.7
Peru	20.1	775.7	8.4	10.1	81.6
Uruguay	3.1	941.4	2.4	1.1	96.5
Venezuela	8.4	344.7	45.5	7.0	47.5
South America	162.1	589.2	20.0	9.2	70.8
Mexico	78.2	790.6	17.4	5.5	77.1
LAC	265.1	562.8	22.1	13.8	64.1

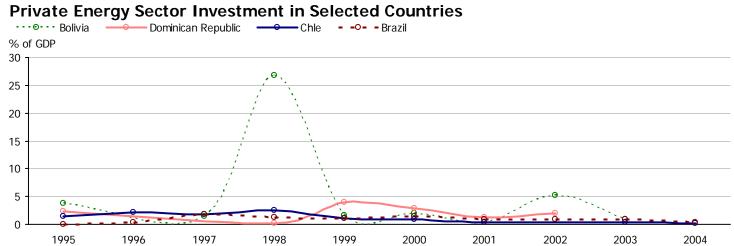
### 5.6 | Water Resources

# Improved Drinking Water Coverage (% population with access)

		tal lation		ıral lation		oan lation		Internal Groundwater Recharge per capita	Natural Renewable Water per capita	Tap Water Safety
	1990	2002	1990	2002	1990	2002	1	(cubic meters)	(cubic meters)	index
Antigua and Barbuda		91		89	95	95	i		715.5	·   .
Bahamas		97		86	98	98	i		64.5	.
Barbados	100	100	100	100	100	100	i	274.7	298.0	.
Belize		91		82	100	100	i		74,013.4	
Dominican Republic	86	93	72	85	97	98	İ	1,357.4	2,436.8	3.4
French Guiana		84		71		88	İ		771,978.3	
Guyana		83		83		83	i	134,865.8	315,559.9	.
Haiti	53	71	43	59	77	91	i	262.5	1,706.7	.
Jamaica	92	93	86	87	97	98	i	1,481.7	3,580.2	5.9
St. Kitts and Nevis	99	99	99	99	99	99	i	478.0	564.0	.
Suriname		92		73	98	98	i	185,158.2	282,366.2	.
Trinidad and Tobago	92	91	89	88	93	92	i		2,957.8	5.1
Caribbean										
Costa Rica		97		92	100	100	ı	9,109.9	27,451.8	6.3
El Salvador	67	82	47	68	88	91	i	958.7	3,933.0	3.6
Guatemala	77	95	69	92	88	99	i	2,800.0	9,245.0	3.7
Honduras	83	90	78	82	89	99	i	5,751.6	14,147.4	3.5
Nicaragua	69	81	42	65	92	93	i	11,059.0	36,867.5	5.2
Panama		91		79	99	99	i	6,854.9	48,303.8	6.1
Central America								5,55	12/2001	
Argentina	94		73		97	97	ı	3,370.1	21,432.0	6.2
Bolivia	72	85	48	68	91	95	i	15,037.5	72,009.9	5.0
Brazil	83	89	55	58	93	96	i	10,632.2	46,710.1	4.9
Chile	90	95	49	59	98	100	i	8,966.7	59,052.3	6.5
Colombia	92	92	78	71	98	99	i	11,717.0	48,981.7	5.4
Ecuador	69	86	54	77	81	92	i	10,460.5	33,723.3	4.6
Paraguay	62	83	46	62	80	100	i	7,142.7	58,535.6	4.2
Peru	74	81	42	66	88	87	İ	11,320.0	71,469.4	3.7
Uruguay		98		93	98	98	1	6,782.8	40,991.8	6.8
Venezuela		83		70		85		8,998.6	48,884.5	3.7
South America	·	20	•	. •	•	30		2,. 70.0	,	
		91	54	72	90	97		1,363.2	4,484.1	3.4

### 5.7 | Energy Use and Supply

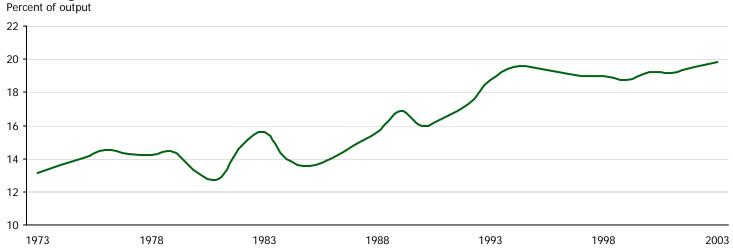
	Energy Production (Kt of oil equivalent)		(Kt	Energy Use (Kt of oil equivalent)		yy Use apita of oil alent)	Energy Imports (% commercial use)		Energy Supply p \$1000 GDP (Kg of oil equivalent)	
	1998	2003	1998	2003	1998	2003	1998	2003	1997	2002
Dominican Republic	1,380	1,546	7,314	7,971	912	923	81	81	166	148
Haiti	1,626	1,673	2,072	2,237	269	270	22	25	157	152
Jamaica	467	468	3,683	4,059	1,440	1,543	87	88	388	393
Netherlands Antilles			1,441	1,647	8,055	9,210				
Trinidad and Tobago	13,873	28,842	8,070	11,096	6,324	8,553	-72	-160	631	771
Caribbean	4,337	8,132	4,516	5,402	3,400	4,100	29.5	8.6	336	366
Costa Rica	1,063	1,626	2,721	3,675	726	880	61	56	99	106
El Salvador	1,894	2,390	3,763	4,487	624	675	50	47	138	141
Guatemala	4,966	5,469	6,305	7,293	591	608	21	25	148	157
Honduras	1,896	1,659	3,331	3,597	546	522	43	54	202	201
Nicaragua	1,458	1,805	2,551	3,099	535	588	43	42	177	176
Panama	643	689	2,573	2,607	907	836	75	74	146	170
Central America	1,987	2,273	3,541	4,126	655	685	48.8	49.5	152	159
Argentina	79,710	84,318	61,019	59,851	1,690	1,575	-31	-41	135	145
Bolivia	5,986	7,728	4,838	4,451	606	504	-24	-74	244	208
Brazil	126,541	171,139	176,864	193,245	1,048	1,065	28	11	145	146
Chile	7,806	8,336	23,534	26,268	1,566	1,647	67	68	170	168
Colombia	73,906	74,363	30,634	28,371	753	642	-141	-162	116	102
Ecuador	21,319	23,617	7,795	9,105	652	708	-173	-159	188	208
Paraguay	6,865	6,623	4,344	3,989	834	679	-58	-66	181	160
Peru	9,787	9,444	11,894	12,003	474	442	18	21	96	93
Uruguay	1,234	1,161	2,966	2,519	901	738	58	54	98	100
Venezuela	232,173	179,622	58,152	54,227	2,484	2,112	-299	-231	363	413
South America	56,533	56,635	38,204	39,403	1,101	1,011	-55.5	-57.8	174	174
Mexico	228,542	242,511	147,793	159,935	1,552	1,564	-55	-52	187	180
LAC	39,197	40,716	26,075	27,533	1,522	1,649	-9.5	-14.2	199	207



# 5.8 | Electricity Production by Source percent of total production

	Prod	Electricity Production (million KWh)		Coal Sources	•	dro- ctric		ural as	Nuc	lear	c	Dil
	1998	2003	19	98 2003	1998	2003	1998	2003	1998	2003	1998	2003
Dominican Republic	7,693	13,507	9.	5 21.1	9.5	8.9		0.1			80.6	69.5
Haiti	663	535	.		46.2	47.7	•				53.8	52.3
Jamaica	6,480	7,146	.		1.8	1.6	•				96.7	96.9
Netherlands Antilles	1,116	1,079	.								100	100
Trinidad and Tobago	5,169	6,437	.				99.4	99.7			0.2	0.1
Caribbean	21,121	28,704										
Costa Rica	5,387	7,566			79.1	78.3					8.2	1.8
El Salvador	3,837	4,077	.		40.8	35.8	·				46.8	40.0
Guatemala	4,456	6,561	.	14.5	36.2	37.8	•				48.7	34.8
Honduras	3,414	4,530	.		56.3	48.0	•				43.7	51.7
Nicaragua	2,153	2,707	.		13.7	11.0					77.1	75.2
Panama	4,191	5,576			51.1	50.6	•				48.4	49.0
Central America	23,438	31,017										
Argentina	74,170	92,074	2.	3 1.0	35.9	36.8	46.0	51.7	10.0	8.2	5.2	1.1
Bolivia	3,685	4,270	.		41.1	60.3	54.9	18.5			2.5	19.1
Brazil	321,943	364,899	2.	2 2.4	90.5	83.8	0.4	3.6	1.0	3.7	3.5	3.0
Chile	35,509	48,780	35	.3 13.5	44.9	46.3	11.8	35.4			5.6	1.3
Colombia	45,952	47,082	9.	4 8.1	67.0	76.8	22.0	13.6			0.4	0.3
Ecuador	10,890	11,546	.		59.7	62.2		8.1			40.3	29.7
Paraguay	50,883	51,771	.		99.9	100					0.0	
Peru	18,575	22,924	.	3.3	74.3	80.8	4.0	5.2			21.0	9.7
Uruguay	9,571	8,580	.		95.6	99.4		0.0			4.0	0.2
Venezuela	80,904	91,844	,		71.6	66.0	22.5	17.6			5.9	16.4
South America	652,082	743,770										
Mexico	181,801	218,654	9.	8 14.3	13.5	9.1	16.9	35.4	5.1	4.8	51.4	32.4
LAC	878,442	1,022,145										

# **LAC Regional Electric Power Transmission and Distribution Losses**Percent of output



# 5.9 | Carbon Dioxide Emissions - 2002 metric tons of Carbon emissions

### Total emissions by activity (thousand metric tons)

	Per Capita		rotai emissi	ons by activity (tr	iousand metric to	ons)	
	Emissions (metric tons)	Fossil Fuel Consumption	Solid Fuel Consumption	Liquid Fuel Consumption	Gas Fuel Consumption	Cement Production	Gas Flaring
Antigua and Barbuda	1.39	101	0	101	0	0.0	0.0
Aruba	5.75	541	0	541	0	0.0	0.0
Bahamas	1.83	568	1	567	0	0.0	0.0
Barbados	1.24	333	0	277	15	40.5	0.0
Belize	0.81	215	0	215	0	0.0	0.0
Bermuda	1.67	136	0	136	0	0.0	0.0
British Virgin Islands	0.88	18	0	18	0	0.0	0.0
Dominica	0.46	33	0	33	0	0.0	0.0
Dominican Republic	0.68	5,870	169	5,284	0	417.7	0.0
Falkland Islands	3.85	12	3	8	0	0.0	0.0
Grenada	0.78	63	0	63	0	0.0	0.0
Guadeloupe	1.07	469	0	438	0	31.3	0.0
Guyana	0.57	439	0	439	0	0.0	0.0
Haiti	0.06	482	0	443	0	39.4	0.0
Jamaica	1.12	2,945	64	2,798	0	83.5	0.0
Martinique	1.57	612	0	582	0	29.9	0.0
Netherlands Antilles	6.14	1,345	0	1,345	0	0.0	0.0
St. Kitts and Nevis	0.74	31	0	31	0	0.0	0.0
St. Lucia	0.65	103	0	103	0	0.0	0.0
St. Vincent and Grenadines	0.47	50	0	50	0	0.0	0.0
Suriname	1.42	614	0	605	0	8.8	0.0
Trinidad and Tobago	8.80	11,231	0	1,090	9,432	95.2	613.1
Caribbean	1.91	26,211	237		9,432	746.3	613.1
Caribbeari	1.91	20,211	237	15,167	9,447	740.3	013.1
Costa Rica	0.40	1,590	0	1,440	0	149.6	0.0
El Salvador	0.26	1,698	1	1,518	0	179.2	0.0
Guatemala	0.23	2,807	0	2,584	6	217.6	0.0
Honduras	0.24	1,621	102	1,370	0	149.6	0.0
Nicaragua	0.20	1,054	0	1,005	0	49.0	0.0
Panama	0.56	1,704	43	1,525	33	103.4	0.0
Central America	0.32	10,474	146	9,442	39	848.4	0.0
	0.07	0,,000	000	44.450	04.405	504.0	0.0
Argentina	0.96	36,328	232	14,458	21,105	531.8	0.0
Bolivia	0.32	2,745	0	1,080	1,353	165.1	147.3
Brazil	0.49	85,492	13,317	57,990	7,558	5,372.0	1,255.2
Chile	1.00	15,619	3,007	8,378	3,648	489.6	96.8
Colombia	0.36	15,634	2,541	7,372	4,090	1,332.8	297.3
Ecuador	0.53	6,767	0	5,814	92	389.0	472.0
Paraguay	0.20	1,123	0	1,035	0	88.4	0.0
Peru	0.26	6,945	754	5,225	422	544.0	0.0
Uruguay	0.33	1,112	1	963	12	136.0	0.0
Venezuela	1.17	29,472	85	12,961	13,772	952.0	1,703.5
South America	0.56	201,237	19,937	115,276	52,052	10,000.7	3,972.1
Mexico	1.01	104,543	5,482	69,840	24,049	4,225.4	945.3
LAC	1.29	342,465	25,802	209,725	85,587	15,820.8	5,530.5

### **Sources and Technical Notes - Environment**

### **Figures**

## **Electricity Production and Consumption Growth**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006.

**Definitions** *Electricity consumption* The annual total of Kilowatt Hours demanded per year. *Electricity production* The annual total of Kilowatt Hours indigenously produced per year.

### **Increase in Access to Sanitation Services**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006.

**Definition** Access to sanitation services the percentage of the population with at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent human, animal, and insect contact with excreta. Improved facilities range from simple but protected pit latrines to flush toilets with a sewerage connection. To be effective, facilities must be correctly constructed and properly maintained.

## Increase in Access to Improved Water Sources

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006.

**Definition** Access to improved water sources the percentage of the population with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trucks, and unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling.

### Table 5.1

### **Environmental Sustainability Index**

Source Esty, Daniel C., Marc Levy, Tanja Srebotnjak, and Alexander de Sherbinin (2005). 2005 Environmental Sustainability Index: Benchmarking National Environmental Stewardship. New Haven: Yale Center for Environmental Law & Policy. Available online at http://www.yale.edu/esi/.

**Definitions** Paraphrasing the 2005 Environmental Sustainability Index Report, the Environmental Sustainability Index (ESI) benchmarks the ability of nations to protect the environment over the next several decades. It does so by integrating 76 data sets into 21 indicators of environmental sustainability; tracking natural resource endowments, past and present pollution levels, environmental management efforts, and a society's capacity to improve its environmental performance. That is, "The ESI score quantifies the likelihood that a country will be able to preserve valuable environmental resources effectively over the period of several decades. Put another way, it evaluates a country's potential to avoid major environmental deterioration." (ibid p.23) Higher scores The index is reported as an are more favorable. aggregate index and its five component scores listed below.

Environmental *Systems component* The extent to which a country maintains its environmental systems "at healthy levels, and to the extent to which levels are improving rather than deteriorating" (ibid p. 11).

Environmental *Stresses component* The extent to which "the levels of anthropogenic stress are low enough to engender no demonstrable harm to its environmental systems" (ibid).

Human vulnerability The extent to which "people and social systems are not vulnerable to environmental disturbances that affect basic human wellbeing" (ibid).

Social and Institutional *Capacity component* The extent to which a country "has in place institutions and underlying social patterns of skills, attitudes, and networks that foster effective responses to environmental challenges" (ibid).

Global *Stewardship component* The extent to which a country "cooperates with other countries to manage common environmental problems, and if it reduces negative transboundary environmental impacts on other countries to levels that cause no harm" (ibid).

### Table 5.2

### **Threatened Species and Protected Marine Areas**

**Source** United Nations Environmental Program (available online a http://geodata.grid.unep.ch/) as of April, 2006.

**Definitions** Animal species threatened and Plant species threatened the number of respective species listed in the IUCN Red List of Threatened Species. Protected Marine Areas those areas under IUCN Categories I-VI as listed in the World Conservation Monitoring Centre Protected Areas Database.

### Table 5.3

### Land Resources and Use

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006; and United Nations Environmental Program (online at http://geodata.grid.unep.ch/) as of April, 2006.

**Definitions** All statistics are measured relative to a country's total land area. *Agricultural land* equals the sum of *Arable land and permanent crops* with *Permanent pasture* land. *Other land* is the total land area that is not *Arable land and permanent crops* and includes forest and woodland, as well as logged-over areas to be forested in the near future. Also included are uncultivated land, grassland not used for pasture, wetlands, wastelands, and built-up areas--residential, recreational, and industrial lands and areas covered by roads and other fabricated infrastructure. *Permanent pasture* an established plant community in which the dominant species are perennial grasses, there are few or no shrubs, and trees are absent. *Forest area* is land under natural or planted stands of trees, whether productive or not. Graphically represented that is:

Country'	s total land area		
Total agricultural a	area	non	agricultural
	Permanent pasture	11011	-agricultural
Arable land and permanent crops	Other la	nd use	
			Forest area
<	100% —		$\longrightarrow$

### Table 5.4

### **Agriculture and Aquaculture**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006; and United Nations Environmental Program (http://geodata.grid.unep.ch/) as of April, 2006.

**Definitions** Agricultural production index a price-weighted sum of a country's total net agricultural production during a calendar year. The per capita net production of a country's agricultural sector, excluding production of seed and feed and intermediate agricultural inputs: Each year's figure is the ratio of that year's production relative to the average production during 1999-2001, multiplied by 100. production index excluding, coffee and tea, the per capita production of a country's agricultural products that contain nutrients. Calculated relative to the 1999-2001 period and multiplied by 100. Fertilizer refers to nitrogenous, phosphate and potash fertilizers. Water use the proportion of a country's total water use that is used by its agricultural sector.

**Notes** Agricultural production index and Food production index reliability is limited by the accuracy and precision of production and price data as production data is derived rather than directly measured. Presented figures are calculated using the FAO's method.

### Table 5.5

### **Water Use**

**Source** United Nations Environmental Program (http://geodata.grid.unep.ch/) as of April, 2006.

**Definitions** Water use annual gross quantity of water produced and used from conventional and non-conventional sources for agricultural, industrial and domestic purposes, but excluding uses that are typically non-consumptive, such as energy, mining, recreation, navigation, fisheries and the environment. **Domestic** usually is computed as the total amount of water supplied by public distribution networks, including connected industries. **Industry** refers to self-supplied industries that are not connected to any distribution network.

**Notes** *Agricultural use* usually refers to livestock and irrigation; however some countries categorize livestock under domestic use. Therefore, inter-country comparisons should be done with care.

### Table 5.6

### **Water Resources**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006; and United Nations Environmental Program (http://geodata.grid.unep.ch/) as of April, 2006; and IMF, *World Economic Outlook*, April, 2006.

**Definitions**Improved drinking water access the percentage of people with reasonable access to an adequate amount of water from an improved source, such as a household connection, public standpipe, borehole, protected well or spring, and rainwater collection. Unimproved sources include vendors, tanker trunks, and

unprotected wells and springs. Reasonable access is defined as the availability of at least 20 liters a person a day from a source within one kilometer of the dwelling. Internal groundwater recharge the total volume of water entering aquifers within a country's borders from endogenous precipitation and surface water flow. Natural renewable water the sum of internal and external renewable water resources. It corresponds to the maximum theoretical amount of water available for a country in an average year. Tap water safety the average response to the World Economic Forum's 2001 Executive Opinion Survey asking "Tap water in your city is (1=unsafe and inaccessible for drinking, 7=safe and easily accessible for drinking)."

### Table 5.7

### **Energy Use and Supply**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006; and United Nations Environmental Program (http://geodata.grid.unep.ch/) as of April, 2006.

**Definitions** Energy production refers to primary electricity as well as forms of primary energy—petroleum (crude oil, natural gas liquids, and oil from nonconventional sources), natural gas, solid fuels (coal, lignite, and other derived fuels), and combustible renewables, and waste. apparent consumption of Energy use commercial energy, which is equal to native production plus imports and stock changes, minus exports and fuels supplied to ships and aircraft engaged in international transport. Energy imports calculated as the difference between energy use and energy production; a negative number indicates a net exporter of energy. Energy supply per \$1000 GDP the ratio of energy use per unit of gross domestic product measured in terms of purchasing power parity (PPP). Total primary energy domestic supply is calculated as production of fuels + inputs from other sources + imports - exports - international marine bunkers + stock changes. It includes coal, crude oil, natural gas liquids, refinery feedstocks, additives, petroleum products, gases, combustible renewables and waste, electricity, and heat. Domestic supply differs from final consumption in that it does not take account of distribution losses. The supply and use of energy commodities are converted to Kg oil equivalent using standard coefficients for each energy source. Private energy sector investment infrastructure projects in energy (electricity and natural gas transmission distribution) that have reached financial closure and directly or indirectly serve the public. Movable assets and small projects such as windmills are excluded. The types of projects included are operations and management contracts, operations and management contracts with major capital expenditure, greenfield projects (in which a private entity or a public-private joint

venture builds and operates a new facility), and divestiture.

**Notes** *Private energy sector investment* unmarked points represent interpolation between surrounding marked data points.

### Table 5.8

### **Electricity Production by Source**

**Source** World Bank, *World Development Indicators* (online version) as of May, 2006.

Definitions Electricity production measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy, as well as that from combustible renewables and waste. Production includes the output of electricity plants that are designed to produce electricity solely as well as that of combined heat and power plants (i.e., cogeneration plants). Electric power transmission and distribution losses include losses in transmission between sources of supply and points of distribution and in the distribution to consumers, including pilferage. Production less transmission and distribution losses, own-use, and transformation losses is equal to end-use electricity consumption.

**Notes** *Natural gas* refers to natural gas but excludes natural gas liquids. *Oll* refers to crude oil and petroleum products. *Regional electricity transmission losses* is the unweighted average of the following countries: Mexico, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Honduras, Haiti, Nicaragua, Panama, Peru, Paraguay, El Salvador, Uruguay, and Venezuela

### Table 5.9

### **Carbon Dioxide Emissions**

**Source** Carbon Dioxide Information Analysis Center, *Trends Online: A Compendium of Data on Global Change.* Oak Ridge National Laboratory, US Department of Energy, Oak Ridge, Tennessee, as of September 2005.

**Definitions** *Emissions* materials (gases, particles, vapors, chemical compounds, etc.) that come out of smokestacks, chimneys, and tailpipes. *Fossil fuel* any hydrocarbon deposit that can be burned for heat or power, such as petroleum, coal, and natural gas. *Flaring* the burning of waste gases through a flare stack or other device before releasing them to the air.